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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,740	03/24/2004	Wei-Chen Chen	370.8023USU	4642
7590	06/28/2005		EXAMINER	
Paul D. Greeley Esq. Ohlandt, Greeley, Ruggiero & Perle, L.L.P. 10th Floor One Landmark Square Stamford, CT 06901-2682			KLAUS, LISA NHUNG	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

**Office Action Summary**

Application No.

10/807,740

Applicant(s)

CHEN, WEI-CHEN

Examiner

Lisa N. Klaus

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3 and 5-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 6 and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by King et al. (US 6,423,918).

King discloses a dome switch comprising:

- Regarding claim 1, King discloses:

- a mounting end portion 40 disposed in a first plane;
- a central operating portion 34 disposed in a second plane;
- an intermediate buffer portion 32 interconnecting portion and;
- first and second support portions 40, 48 spaced apart from each other in a second direction transverse to the first direction and extending from the central operating portion in the first direction toward the first plane.

- Regarding claims 5 and 11, King discloses:

- the central operating portion is formed with a projection 36 that protrudes in the first direction toward the first plane or circuit board 16, and that contacts electrically the electrical contact unit when the central operating portion 34 is in the pressed position.

- Regarding claim 6, King discloses:

- the first and second support portions 40 extend inclinedly from the central operating portion 34 and away from each other.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 7-10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over King in view of Martin (US 4,376,238).

King discloses the instant claim invention as discussed above except that the is mounting end portion soldered on the circuit board and the intermediate buffer portion includes a bend section.

Martin discloses an electrical device comprising:

- Regarding claim 8, King discloses:

- the intermediate buffer portion includes a bend section extending from the mounting end portion and linear extension section extending from the bend section 18 to the central operating portion.

- Regarding claims 3 and 9, King discloses:

- wherein the bend section 18 is inverted U – shaped.

- Regarding claim 10, Martin discloses:

- the intermediate buffer portion having a curved section 18 extending from the mounting end portion in the first direction toward the central operating portion.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the bend intermediate buffer portion as taught by Martin with King's switch for the purpose of extending the switches' life.

- Regarding claim 7, King further discloses:

- a circuit board 16 with an electrical contact unit 18;
- a mounting end portion 40 soldered on the circuit board 16;
- a central operating portion 34 spaced apart from the electrical contact unit of the circuit board 16 in a first direction;
- an intermediate buffer portion 32 interconnecting the mounting end portion 40 to the central operating portion 34;
- first and second support portions 40, 48 spaced apart from each other in a second direction transverse to the first direction and extending from the central operating portion 34 in the first direction toward the circuit board 16;
- the central operating portion 34 being operable so as to move from a normal position, where the central operating portion 34 is spaced apart from the electrical contact unit, to a pressed position, where the central operating portion 34, the intermediate buffer portion 32 and the first and second support portions 40 deform and where the central operating portion 34 contacts electrically the electrical contact unit 18.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a mounting end portion to soldered on the circuit board for the purpose of obvious design choice of those skill in the art.

- Regarding claim 12, King discloses:

- the first and second support portions 40, 48 extend inclinedly from the central operating portion 34 and away from each other, and have distal ends that are in contact with the circuit board 16;

- Regarding claim 13, King discloses:

- the circuit board 16 is further formed with a solder pad 20 for mounting the mounting end portion 40 of the conductive body 30 thereon, the central operating portion 34 connecting electrically the electrical contact unit to the solder pad 18 when the central operating portion 34 is in the pressed position.

- Regarding claim 14, King does not disclose a pair of electrical contacts space a part from each other.

- Martin discloses the electrical contacts unit included a pair of electrical contacts 12 and 13 spaced apart from each other, the central operating portion interconnecting electrically the electrical contacts of the electrical contact unit when the central operating portion is in the pressed position.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the pair the electrical contacts 12 and 13 as taught by Martin with King's switch for the purpose of conducting electricity easily, since it has been held that mere duplication of the essential working parts

of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

***Response to Arguments***

3. Applicant's arguments filed 6/10/05 have been fully considered but they are not persuasive.

- Page 6, paragraph 1, Applicant argues that "King fails to disclose or suggest a unitary....., as recited in claim 1". This argument is not found to be persuasive because King teaches everything except for the intermediated buffer portion includes a bend section as stated in the Office Action. Martin teaches the intermediate buffer portion having a curved section 18 extending from the mounting end portion in the first direction toward the central operating portion. Martin is only cited to teach the intermediate buffer portion having a curved section 18.

- Page 7, paragraph 3, Applicant argues that "King fails to disclose or suggest a mounting end portion soldered on the circuit board". This argument is not found to be persuasive because Martin teaches the mounting end portion soldered on the circuit board for the purpose of obvious design choice of those skill in the art.

- Page 9, paragraph 2, Applicant argues that "Neither King nor Martin addresses the problem of extending the switches' life". This argument is not found to be persuasive because Martin teaches the membrane 18 with the intermediate buffer portion having a curved section 18 which the same as the present prior art's structure. Martin meets all of the positively recited structure of the intermediate buffer portion. Therefore, Martin supports the same function as the structure of the claims.

**Conclusion**

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Lisa Nhung Klaus whose telephone number is (571)272-1993, and whose fax number is 703-872-9306. In the event that I am not reached, you can contact my supervisor, Mr. Elvin G. Enad at (571)272-1990 or the tech center receptionist at (703) 308-1782.

LK

Lisa Nhung Klaus

Patent Examiner - Art Unit 2832

January 29, 2005



MICHAEL FRIEDHOFER  
PRIMARY EXAMINER